Notice of Allowability	Application No.	Applicant(s)	
	10/623,974	BILOTTI ET AL.	
	Examiner	Art Unit	
	Danny Nguyen	2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *"the RCE filed 6/3/2005*.

2. ☒ The allowed claim(s) is/are *5-11,21 and 24-26*.

3. ☒ The drawings filed on *21 July 2003* are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 6/3/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Allowable Subject Matter

Claims 5-11, 21, 24, 25, 26 are allowed.

The following is an examiner's statement of reasons for allowance:

Claim 5 recites a switching system for providing a signal in response to an article which provides a magnetic field comprises a threshold detection circuit coupled to the sensor to receive the first and second signal voltages and to provide an output signal having a first value when said magnetic article is within a predetermined distance of the sensor regardless of the polarity of the magnetic field; and a bias circuit coupled to said threshold detection circuit for maintaining operating signals in said threshold detection circuit within a predetermined range of operating signal levels in response to changes in supply voltage and operating temperature.

Claim 21 recites a method of switching comprises the steps of in response to the sensor output signal level reaching or exceeding the one of the first and second threshold signal levels, providing an output signal having a first signal level regardless of the direction of the sensor output signal; in response to the sensor output signal having a first signal level which is less than the one of the first and second threshold signal levels, providing an output signal having a second different signal level regardless of the direction of the sensor output signal; and in response to the output signal changing from the first signal level to the second different signal level, changing a switch point of a threshold circuit from a first predetermined threshold level to a second predetermined threshold level.

Claim 25 recites a switching system for providing a signal in response to an article which provides a magnetic field comprises a threshold detection circuit coupled to the sensor to receive the first and second signal voltages and responsive to a supply voltage to provide an output signal having a first value when said magnetic article is within a predetermined distance of the sensor regardless of the polarity of the magnetic field, said threshold detection circuit comprising a circuit for comparing said first signal voltage to a first threshold level and for comparing said second signal voltage to a second threshold level, wherein said first and second threshold levels are substantially constant in response to variations in said supply voltage.

Claim 26 recites a switching system for providing a signal in response to an article which provides a magnetic field comprises a threshold detection circuit coupled to the sensor to receive the first and second signal voltages and responsive to a supply voltage to provide an output signal having a first value when said magnetic article is within a predetermined distance of the sensor regardless of the polarity of the magnetic field, said threshold detection circuit comprising a circuit for comparing said first signal voltage to a first threshold level and for comparing said second signal voltage to a second threshold level, wherein the first threshold level is changed to a third threshold level and the second threshold level is changed to a fourth threshold level in response to the output signal changing from the first value to a second value. The references of record do not teach or suggest the aforementioned limitation, nor would it be obvious to modify those references to include such limitation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danny Nguyen whose telephone number is (571)-272-2054. The examiner can normally be reached on Mon to Fri 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571)-272-2058. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DN

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1/25/2006

Stephen W. Jackson 2-1-06

STEPHEN W. JACKSON
PRIMARY EXAMINER